NOTE XVI.

THE PROBOSCIS-MONKEY FROM BORNEO

BY

Dr. F. A. JENTINK.

February 1902.

(With 5 Plates).

The other day I have been struck by the following phrase in a paper by Dr. G. Brandes, entitled: »Ueber die Nasenaffen", Zeitschrift für Naturwissenschaften, 1901, p. 284: »Es ist wohl zweifellos, dass der tibetanische und der »bornesische Nasenaffe zu *einer* Gattung zu vereinigen sind, »als deren wesentliche Charactere die mächtige Entwick- »lung der Nasenmuskulatur und die schwach ausgebildeten »oder gar ganz fehlenden Nasenbeine zu gelten haben. Ich »werde danach von *Rhinopithecus nasicus* (Borneo) und »*roxellanae* (Tibet) sprechen".

For reasons hereafter to explain the named monkeys cannot be united under the same generic title. We however will admit for a moment »they can", than may be asked why Dr. Brandes did not accept the generic name »*Nasalis*' having a priority of about sixty years over »*Rhinopithecus*"! Further may be asked why he excluded another *Rhinopithecus*, *Rh. Bieti*? The latter has been described and perfectly figured by A. Milne Edwards in »Bulletin du Muséum d'Histoire naturelle, 1897" and »Nouvelles Archives du Muséum d'Histoire naturelle, 1898", as *une nouvelle espèce du genre »Rhinopithecus"*, known as the »*Singe des neiges*" ou »*Tchru tchra*" by the inhabitants; it has been procured

on the »versant occidental de la chaine séparant la vallée du Mékong de celle du fleuve Bleu dans les forêts"; it has a nose exactly like *Roxellana*[1]) and like that species very short nasal bones. It seems that *Rh. Bieti* was an unknown species to Dr. Brandes. Further, the name *nasicus* is not correct, as another specific title *larvatus* was bestowed upon the Borneo-animal twenty years before, by its first describer; therefore the correct orthography should be: *Nasalis larvatus* from Borneo, *Nasalis Roxellana* from the continent and *Nasalis Bieti* too from the continent, if Dr. Brandes' hypothesis could be accepted. The three species however cannot by any means be united in one genus, as *the Bornean Proboscis-monkey differs from all other Semnopitheci* by its having *nasal bones much longer than in any other Semnopithecus! In the youngest skull of our Proboscis-monkey-series the nasalia are a good deal longer than in the figures of the skulls of very old specimens of Roxellana* and *Bieti,* figured in Milne Edwards' papers; in the Bornean-species therefore the »Nasenbeine" are the inverse of »schwach ausgebildet", as Dr. Brandes exhibited as base of his hypothesis; so that till now the Bornean-Monkey stands alone in the genus *Nasalis,* meanwhile the other two are to be united under the generic title *Rhinopithecus.*

Professor Dr. W. Wiedersheim (Zeitschrift für Morphologie und Anthropologie, 1901, Bd. III, pp. 300—348, Beiträge zur Kenntniss der äusseren Nase von *Semnopithecus nasicus,* and pp. 576—582, Nachträgliche Bemerkungen über den *Semnopithecus nasicus* und Beiträge zur

1) *Roxellana* is the correct specific title as given by Milne Edwards in the first description of the animal (Comptes rendus des séances de l'Académie des sciences, Paris, 1870, p. 341). W. L. and P. L. Sclater relate (the Geography of Mammals, 1899, p. 25) that this monkey has been named *roxellanae* from its conspicuous turned-up nose!! The name *certainly* has nothing to do with the animals-nose, as *Roxellana* evidently means *russian!, Roxolania* or *Roxolani* being an old expression for the later intruders or Sclavonians in Russia. (Ph. J. von Strahlenberg, das nord- und östliche Theil von Europa und Asia, 1730, p. 169).

äusseren Nase des genus *Rhinopithecus*) has i. a. in these two papers of high scientific value and adorned with splendid figures, collected and exhibited all he could gather concerning the remarkable elongated nose of the Proboscis-Monkey, reaching the question whether this organ is moveable by the animal at his will or if it may be regarded as being a hinderance in its movements and feeding. As a matter of fact only can be considered the observations made by trustworthy people having seen the animal in a living state; these are four, namely: Baron van Wurmb, Dr. O. Finsch, Prof. Sluiter and Prof. Selenka [1]); and now we find two opinions; the first two observers — see for v. Wurmb hereafter p. 120 — state that they never have seen that the Proboscis-Monkeys hold fast their nose if jumping, moreover Dr. Finsch personally told me that they do not remove the pendulous nose when bringing the food in the mouth, meanwhile Prof. Sluiter and Prof. Selenka imformed Prof. Wiedersheim by letter: »dass die »Nahrung nicht in den Mund eingebracht werden konnte, »bevor nicht die über den Mund herabhängende Nase empor»gehoben wurde". The conclusion is therefore that we want new and more observations and, although it seems to me that there is better ground to accept the opinion of v. Wurmb and Finsch, as I hardly can believe that such a marvellously developed and remarkable organ would be a kind of hinderance to its happy possessor instead of being of use perhaps as an ornament or if blown up and fulled with blood as hideous frightful, I think we should practice the golden sentense »in dubiis abstine". At all events there are no »données" for hypotheses like Dr. Brandes has given one in the following style: »wird die Nase dem borne»sischen Nasenaffen im freien Wettbewerb ernstlich hinder-

1) Dr. O. Mohnike (Blicke auf das Pflanzen- und Thierleben in den Niederländischen Malaienländern, 1883, p. 383) made not a single observation concerning the nose of our Monkey, notwithstanding he relates: »ich habe zu »Sambas mehrere lebende Exemplare dieser Affenart selbst besessen und noch »verschiedene andere daselbst bei Bekannten von mir gesehen".

»lich werden, so muss entweder eine allmähliche Reduktion »der Nase gezüchtet werden, oder die Art muss aussterben". I throughout agree with Prof. Wiedersheim where he formulates his opinion as follows: »kurz, wie man sich auch »wenden und drehen mag: eine befriedigende Lösung der »Frage ist vorderhand nicht möglich und wird auch so »lange nicht zu erwarten sein, bis es nicht gelungen ist, »in die biologischen Verhältnisse des in der Freiheit lebenden »Thieres einen klareren Einblick zu gewinnen".

In consulting what different writers said about the Proboscis-Monkey I often meet with expressions for the long pendulous nose like *grotesque*, *hideous* and the like. It is unwise for scientific men to use such words, as we never should forget our restricted view; such expressions are good for hysterical persons and for »profanum vulgus", which also call Reptiles and Spiders *hideous* and *ugly*. To the lover of nature and to every man of science all animals are beauties in their kind and wonders in itself. A Proboscis-Monkey without nose or with a small one will be judged »grotesque" among the ladies of that monkeys-society, as sure as our ladies dislike and call »grotesque" a nose as Cyrano de Bergerac or Scipio (Nasica) had, in both cases abnormities or monsters.

As the Leyden Museum possesses a splendid series and bony parts of the Proboscis-Monkey I can give here some fine photo's; they represent the following individuals (alcohol-specimens):

plate 1, fig. 1, foetus, 8 Cm. N°. *k* of the »Catalogue systématique".
plate 2, fig. 1, » » » » » » » » »
plate 1, fig. 2, » 19 » N°. *j* » » » »
plate 2, fig. 2, » » » » » » » » »
plate 1, fig. 3, adult male, received in 1892, not in the Catalogue.
plate 2, fig. 3, » » » » » » » » »
plate 3, fig. 1, very young, N°. *j* of the »Catalogue ostéologique".
plate 4, fig. 1, » » » » » » » »

plate 3, fig. 2, half-grown, N°. *e* of the »Catalogue ostéologique".
plate 4, fig. 2, » » » » » » »
plate 3, fig. 3, adult male, N°. *g* » » » »
plate 4, fig. 3, » » » » » » » »

From these photo's every one can study the well developed nasalia, prominent in all ages, and that the nose is much more developed, longer and broader in a foetus of *Nasalis larvatus* of 8 cm. than in the most adult specimens of *Rhinopithecus Roxellana* or *Bieti*! In the mentioned small foetus the external opening of the nose is not yet divided by a partition, the larger foetus has this part more pronounced, meanwhile the partition is in the adult male strongly developed; at the same time showing the anterior part of the nose of the latter (seen from below) a hollowing or excavation, and another from the partition to the upper-lip. The nose is well covered with hair, much more than I ever saw in other monkeys; very striking is the covering of the nose of the adult male with numerous alone standing hairs which are rather short, strongly contrasting with the very long hairs on the cheeks which are standing in regular rows, each row consisting on 4 or 5 hairs.

Remarks. That not a single author ever has consulted the original description of the Proboscis-Monkey, but they all followed the easier but worse way of transcribing, may appear if we ask the name of the first describer, the book in which it has been described and its indigenous name; we find the latter as *Kahau*, *Kakau*, *Cabau* and *Kabau*; the author's name *Wurmb*, *van Wurmb*, *Wurmbs* and *Vurmbs*; and the book entitled: »Mémoires de Batavia", »Mémoires de la Société de Batavia", »Memoirs of the Society of Batavia", »Batav. Genootsch. Verhand." or »Verhand. Batav. Genootschap". However the worst of all is that, although some authors call the book by its right title, they invariably — I know no exception — agree in citing T. 3, 1781, p. 145 [1]); and as T. 1 has been pu-

1) Prof. Schlegel once mentioned: 2de druk, D. 3, bl. 207.

blished in 1781 and T. 3 in 1787 we will look as well after what is told on p. 145 in T. 1 as in T. 3; in the former (p. 145) we fall in the middle of a paper on »Begin »van eene Javaansche Historie genaamd Sadjara Radja »Djawa" and in the latter on p. 145 is the beginning of a »Beschryving der Vogelnestjes door Jan Hooyman"; in both papers no word concerning our Proboscis-Monkey!

I suppose that the periodical in question must be very rare in Libraries and as the dutch language seems to be exceedingly difficult to understand I now will take the trouble to give a part of the original text with its translation, so that the thing may stand right once for all.

Verhandelingen van het Bataviaasch Genootschap der Konsten en Wetenschappen, 1784, T. 2, p. 144; Mr. J. C. M. Rademacher in a paper describing the island of Borneo (Beschryving van het eiland Borneo) relates: »men »vindt ook, op Borneo, veele zoorten van Aapen; waaronder »een, *Cabau* genaamd, rood van kleur, met eene lange lel, »als een Kalkoen, aan de neus, dien hy vast houdt, als hy, »van den eenen boom naar den anderen, springen zal". (there are also in Borneo many monkeys to be found, among them one called *Cabau*, red colored, with a long lap, like a turkey, to the nose, which he holds fast, if he intends to jump from one tree to another one).

and pp. 345—354 of T. 3, 1787 [1]), there is a paper entitled »de *Kahau*, een lang-staartige Aap" (the *Kahau*, a long-tailed monkey) by T. Baron van Wurmb. In a note on p. 345 the author says that he altered the name *Kabau* in *Kahau* as the latter better expresses the cry of the animal. »Zyn voorkomen heeft iets, dat verwondering wekt, »gelykende hy door eene buiten gemeen lange Neus, en »door de verschillende couleuren, zoo van zyne tronie als

1) After Prof. Wiedersheim (Zeitschrift für Morphologie und Anthropologie, 1901, p. 300) Lichtenberg mentioned in 1784, Wurmb's paper published in 1781; however as the latter paper has *not* been published in 1781 but in 1787 we must suppose that Lichtenberg was born with a caul on his head — as he mentioned a paper three years before it had been published!

»van het vagt, veel naar een gemaskerd Mensch; .... uit »deeze zeldzaame kraag vertoond zich de nog zeldzaamer »tronie, als een masker of Mom, met heel bovenstaande »oogen, eene iets uitsteekende snuit, en met eene lange »Neus, die wegens haar lengte, en om dat haar voorder- »gedeelte maar uit eene dunne slappe huid bestaat, verre »over de snuit heenen hangt, zynde het schot der Neus, »van vooren mede maar een zeer dunne huid; ..... de »neus van boven gezien, gelykt ten vollen naar een Menschen- »tong, met een streep in 't midden. De neusgaten zyn »langwerpig rond. Hy kan de Neus uitzetten of opblaazen, »en dan zyn de neusgaten ruim een duim open; .... om »deeze langstaertige aap in het Systema van Linnaeus in »te voeren zoude men hem wegens deszelfs gemaskerd »voorkomen de Latynsche naam van *Cercopithecus larvatus* »kunnen geeven, in 't Nederduitsch konde hy de Masker- »draager genoemt worden". (Its appearance has something surprisingly, as it resembles by the extremely long nose, and by the different colors as well of its face as of its fleece, much more a masked human being; ..... in the midst of the remarkable collar appears the still more remarkable face, like a mask, with on high looking eyes, a somewhat prominent muzzle, and with a long nose; by its length and as its anterior part merely is a thin weak skin, hanging down far over the muzzle, the anterior part of the partition of the nose also being very thin; ..... the nose seen from above resembles exactly a man's tongue, with a streak over its middle. The nostrils are oval. The animal can extend and blow up its nose, and then the nostrils are open for more than a centimeter; .... in order to introduce this long-tailed monkey in the Systema of Linnaeus it may be named by the Latin title *Cercopithecus larvatus*, for its having a masked face, in Dutch it might be called Maskerdrager (Mask-bearer)).

Very interesting is what the Baron van Wurmb relates respecting the habits and manners of the Proboscis-Monkey, on p. 353: »Deeze Aapen wonen in groote troepen by

»malkanderen. Hun geschreeuw dat zeer zwaar is, laat heel »duidelyk het woord *Kahau* hooren, en mogelyk komt het »door de verandering van de H in een B, dat zommige »Europeesen dezelve *Kabaus* noemen. De Inlanders te Pon- »tiana, geeven hun wegens de hoedanigheid hunner neus, »den naam van *Bantangan*. Ze verzaamelen zich s'morgens »vroeg, en 's avonds by zons ondergang, aan de kanten der »rivieren, op de takken van groote boomen, en dan is het »zeer vermaaklyk hun met de grootste gezwindheid van »den eenen boom op den anderen te zien springen, zelfs »op eene hoogte en verheid van 15 tot 20 voeten. Dat ze »hunne Neus vasthouden wanneer ze den sprong doen, heb »ik niet bemerkt; maar wel dat ze dan alle vier de pooten »wyt uitstrekken. Hun voedsel, dat in wortels en bladeren »bestaat, is nog onbekend en daarom is ook alle moeite »om ze in 't leeven te bewaren, te vergeefsch. Men ziet ze, »van zeer verschillende grootte voortteelen, zelfs zulke, die »nog geen voet hoog zijn, hebben reeds jongen". (These monkeys are living together in large troups. Their very strong cry sounds very clearly like the word *Kahau* and perhaps it is by replacing the H by a B, that some Europeans call them *Kabaus*. The natives at Pontianak call them *Bantangan* [1]) after their peculiar nose. In the early morning and at sunset they meet in the branches of large trees along the rivers, and then it is very delightful to see their jumpings between the trees with extreme dexterity, nay at an altitude and at a distance from 15 to 20 feet. I never observed that they hold fast the nose if jumping; I remarked however that they then widely spread the four legs. Their food, roots and leaves, hitherto is unknown, so that all experiments to keep them in confinement have been invain. They breed at different sizes, even individuals as larg as a foot have young ones).

1) Not *Bantanjan* (Audebert, Histoire naturelle des Singes et des Makis), nor *Bantangans* (apud Wiedersheim l. c. p. 300).

Important addition!

While the above paper was going through the press, Dr. A. W. Nieuwenhuis, the Borneo-explorer, was kind enough to furnish me on my request some interesting informations, which he allowed me to publish. He wrote to me as follows:

"Concerning the nose of the Proboscis-Monkey I can tell you, that I don't recollect ever having seen these monkeys holding fast their nose in jumping — and I observed a lot of them in their natural state as well as in confinement. Being corpulent and of a calm temperament they very seldom move so quickly like other monkeys do nay not when flying away. The nose plays no special part and is no hinderance at all when they take their food, because the nose, being somewhat stiff, hangs at a certain distance before the mouth. I don't recollect ever having seen one of my monkeys in confinement drinking, very likely as they solely did like to feed upon fresh leaves. I never observed that even large old males occupied themselves with their nose, neither as if a hinderance nor in other respects. I never saw a striking metamorphosis in the volume or the shape of the nose, always hanging before the mouth of the animal as a somewhat stiff and indifferent appendix, nay not when frightened or in fear as I observed them in confinement. In how far the greater development of that organ in the males influences upon the less privileged females I don't know, but I believe having observed that the full possession of females comes by rights to the strongest male. These are my observations, to which I solely have to add, that the Proboscis-Monkey makes the impression as if indolent, not very fearful and rather slow in its movements. Without great risk they are to treat, even fresh captured old males. Having observed the animals in living state I saw that in about all drawings till now published and in all stuffed specimens, the form of the nose, mostly resembling a piri-

form appendix, had been badly represented, and so I made a photo of a living adult male specimen. This photo is now in the possession of the H. B. School at Deventer. I am sure that, if asked for, the Director of that institution will send it to you". So far Dr. Nieuwenhuis.

Dr. Le Roy, the Director of the H. B. School at Deventer, had the extreme kindness to allow me to reproduce and publish this wonderful photo, Plate 5, the best in existence. I express here my sincere thanks to Dr. Le Roy for his permission prooving so plainly his scientific sense and to Dr. Nieuwenhuis for his valuable observations which blow down the above criticised immature hypotheses.

1.

2.

3.

WÄKERLIN, AD. NAT. PHOT.

L. VAN LEER & CO. AMSTERDAM.

NASALIS LARVATUS (v. Wurmb.)

1.

2.

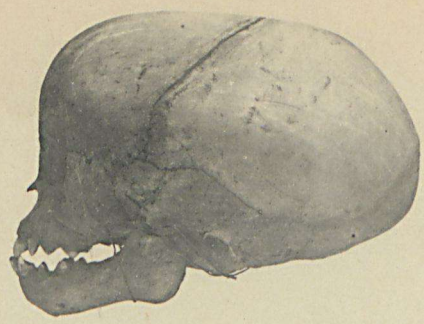
3.

WÄKERLIN, AD. NAT: PHOT.

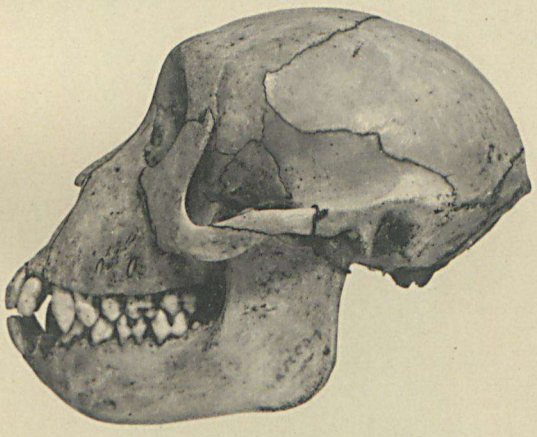
L. VAN LEER & Cº AMSTERDAM.

NASALIS LARVATUS (v. Wurmb.)

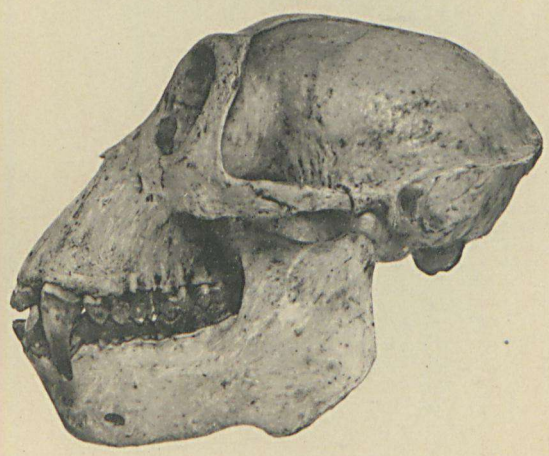
1.



2.



3.

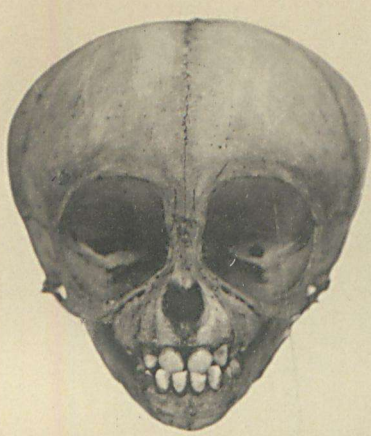


WÄKERLIN, AD. NAT. PHOT.

L. VAN LEER & Cº AMSTERDAM.

NASALIS LARVATUS (v. Wurmb.)

1.

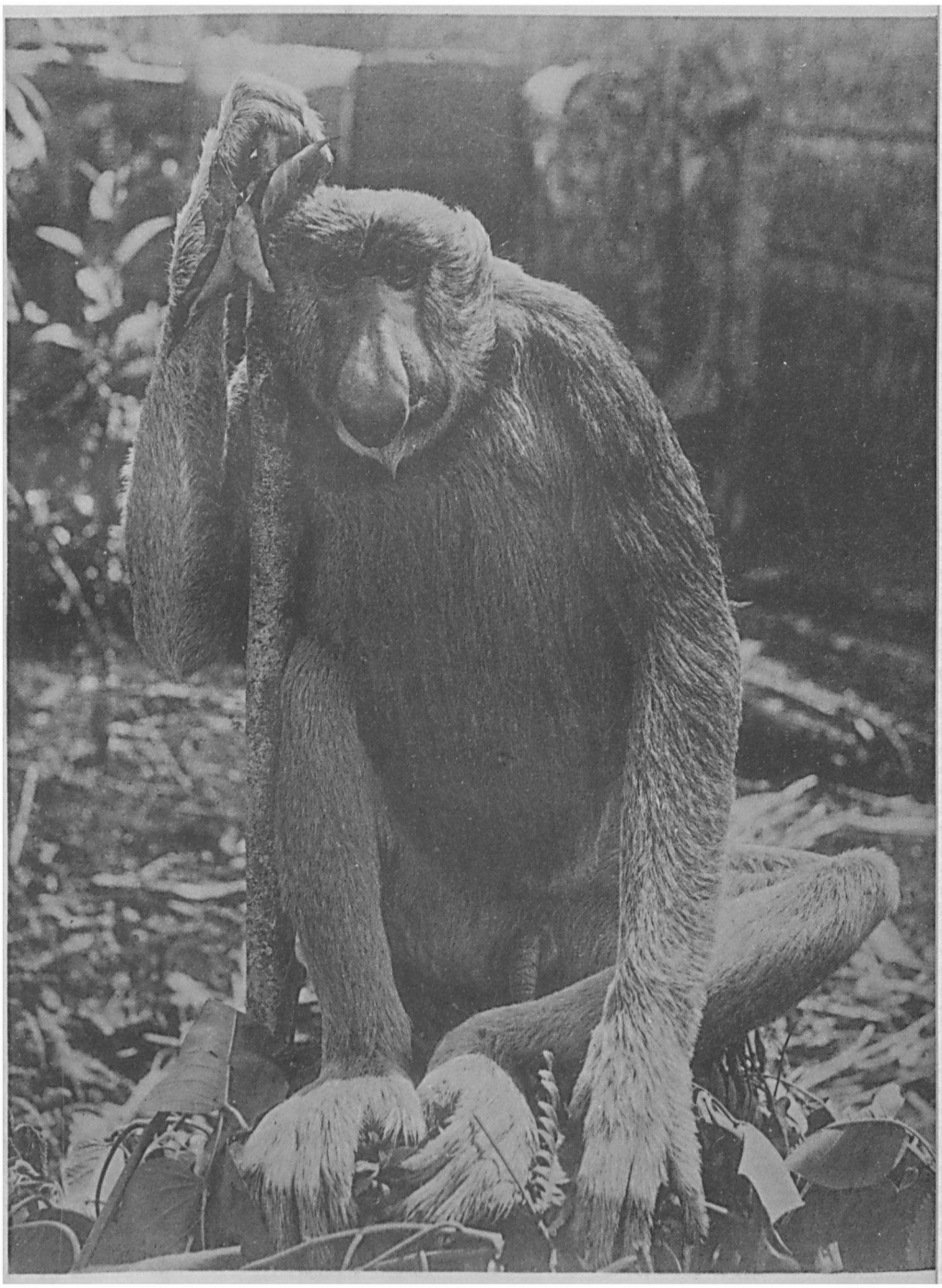


2.

3.

WÄKERLIN, AD. NAT: PHOT. L. VAN LEER & Cº AMSTERDAM.

NASALIS LARVATUS (v. Wurmb.)



AD. NAT. PHOT. L. VAN LEER & Co AMSTERDAM.

NASALIS LARVATUS (v. Wurmb.)